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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/894,864	06/27/2001	John T. Chapman	CISCP230	3690
22434	7590	09/21/2004	EXAMINER	
BEYER WEAVER & THOMAS LLP P.O. BOX 778 BERKELEY, CA 94704-0778			BUTLER, DENNIS	
			ART UNIT	PAPER NUMBER
			2115	

DATE MAILED: 09/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

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<b>Office Action Summary</b>	<b>Application No.</b> 09/894,864	<b>Applicant(s)</b> CHAPMAN ET AL.	
	<b>Examiner</b> Dennis M. Butler	<b>Art Unit</b> 2115	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 27 June 2001.  
 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.  
 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-83 is/are pending in the application.  
     4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) ☒ Claim(s) 14-33 and 47-83 is/are allowed.  
 6) ☒ Claim(s) 1-8, 10, 12, 34-40, 42, 44 and 46 is/are rejected.  
 7) ☐ Claim(s) 9, 11, 13, 41, 43 and 45 is/are objected to.  
 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☐ All    b) ☐ Some \* c) ☐ None of:  
         1. ☐ Certified copies of the priority documents have been received.  
         2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
         3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>02152002</u> . | 6) <input type="checkbox"/> Other: _____  |

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1. This action is in response to the application filed on June 27, 2001. Claims 1-83 are pending.
2. Applicant has not fully paid for all of the presented claims filed in this application. Applicant has filed 83 claims with 10 independent claims. Applicant has paid for 83 claims and 9 independent claims. Applicant must submit the fee for the tenth independent claim that has not been paid for.
3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was

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not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 1, 2, 5, 10, 12, 34, 35, 38, 42 and 44 are rejected under 35 U.S.C. 102(e) as being anticipated by Rabenko et al., U. S. Patent 6,763,032.

Per claims 1 and 34:

A) Rabenko et al teach the following claimed items:

1. at least one CPU and memory with the servers of the head end at column 4, lines 50-55;
2. a head end complex at column 3, lines 52-57;
3. end nodes with the subscriber cable modems at column 3, lines 55-65;
4. downstream and upstream channels at column 4, lines 5-20;
5. fiber nodes at column 3, lines 58-63;
6. local clock circuitry at column 7, line 66 – column 8, line 6 and at column 13, lines 34-61;
7. providing a common clock reference signal (absolute time reference 21) to the local clock circuitry in selected network devices to synchronize them to the common clock reference signal at column 13, lines 1-8, 34-39 and 43-50;
8. distributing the common clock reference signal to the network devices via a first downstream channel at column 13, lines 24-61.

Per claims 2, 5, 10, 12, 35, 38, 42 and 44:

Rabenko describes providing a common clock reference frequency within a range of 5 to 42 Mhz at column 18, lines 54-67. Rabenko describes DOCSIS protocol at column 19, lines 23-26. Rabenko describes end nodes are cable modems at column 3, lines 55-65. Rabenko describes the common clock reference signal corresponds to a modulated carrier signal having a master time stamp at column 13, lines 24-37.

7. Claims 3, 4, 6, 7, 8, 36, 37, 39, 40 and 46 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rabenko et al., U. S. Patent 6,763,032 in view of \$\$\$, U. S. Patent .

Per claims 3, 4, 6, 7, 8, 36, 37, 39, 40 and 46:

Rabenko et al teach the elements of claims 1, 2, 34 and 35 as described in the above rejection. The claims seem to differ from Rabenko et al in that Rabenko et al fail to explicitly teach the elements of claims 3, 4, 6, 7, 8, 36, 37, 39, 40 and 46. However these claims recite obvious variations of well-known synchronization and communications procedures and would have been obvious in view of the teachings and suggestions of Rabenko.

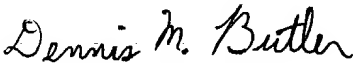
8. Claims 9, 11, 13, 41, 43 and 45 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
9. Claims 14-33 and 47-83 are allowable over the art of record because the art of record does not teach or suggest the combination of elements recited in independent

claims 14, 24, 47, 55, 66, 70, 75, and 79 and particularly the plurality of fiber nodes including at least one RF fiber node and at least one packet fiber node.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dennis M. Butler whose telephone number is 703-305-9663. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Dennis M. Butler

Primary Examiner

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